

Citation for published version:

Bloomfield, M 2017, 'Global production networks and activism: can activists change mining practices by targeting brands?', *New Political Economy*, vol. 22, no. 6, pp. 727-742.
<https://doi.org/10.1080/13563467.2017.1321624>

DOI:

[10.1080/13563467.2017.1321624](https://doi.org/10.1080/13563467.2017.1321624)

Publication date:

2017

Document Version

Peer reviewed version

[Link to publication](#)

This is an Accepted Manuscript of an article published by Taylor and Francis in *New Political Economy* on 9th May 2017, available online: <http://www.tandfonline.com/doi/full/10.1080/13563467.2017.1321624>

University of Bath

Alternative formats

If you require this document in an alternative format, please contact:
openaccess@bath.ac.uk

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Global Production Networks and Activism: Can Activists Change Mining Practices by Targeting Brands?

Michael John Bloomfield

Recommended citation:

Bloomfield, M.J. (2017). Global Production Networks and Activism: Can Activists
Change Mining Practices by Targeting Brands? *New Political Economy*, 1–16.
<https://doi.org/10.1080/13563467.2017.1321624>

Biographical Statement

Michael J. Bloomfield is Lecturer (Assistant Professor) in International Development in the Department of Social and Policy Sciences at the University of Bath. He is a Research Associate at the Oxford Department of International Development and a Research Fellow at the Earth System Governance Project. Prior to his current role, Michael taught at the University of Oxford and the London School of Economics and Political Science. He is author of *Dirty Gold: How Activism Transformed the Jewelry Industry* (MIT Press, 2017).

Contact

Michael J. Bloomfield
Department of Social and Policy Sciences
University of Bath
Email: m.j.bloomfield@bath.ac.uk

Abstract

In this article, I mobilise a Global Production Networks (GPN) approach to study a campaign seeking to impact mining practices by targeting a key consumer market: gold jewellery. In doing so, I make two contributions. The first is empirical: documenting this exploratory campaign and mapping activist strategies and outcomes against the gold production network. The second is theoretical: evaluating whether the GPN toolkit can help explain how the nature of a commodity and its markets impact activist strategies and outcomes. Recasting industries as sites of social struggle, a GPN approach offers a more nuanced understanding of the power permeating markets than more conventional supply chain analyses. The results clarify the challenges activists face when politicising industries by targeting brands, particularly in the extractives sector. But the findings also illuminate opportunities, including the more subtle pathways of activist influence as they: i) gather and disseminate information, ii) place social and environmental issues on the industry agenda, iii) spur industry to create institutions around these issues, iv) insert themselves and their agenda into the production network, and v) form alliances with industry actors pushing for change.

Keywords

Global production networks; activism; direct targeting; brands; gold; jewellery

Introduction

'It is not a natural disaster. It is a disaster prompted by economic activity, but of a magnitude equivalent to those disasters created by forces of nature.'

These were the words of Izabella Teixeira, Brazil's Environment Minister, speaking in the wake of what many consider to be Brazil's worst environmental disaster ever (*Australian Associated Press* 2015). On 5 November 2015, a wastewater dam at an iron-ore mine in Brazil collapsed. The impacts were catastrophic: 600 people lost their homes, 17 were killed, and two remain missing.

Mining accidents do not always end so tragically. But they remain commonplace in an industry riddled with conflict and questionable practices. Despite posing significant social and ecological risks, mining remains an important source of revenue for rich and poor countries alike. Even though projects face frequent opposition from local communities and transnational activists, governments around the world continue to covet mining investment. As such, mining companies can usually count on strong state support. Additionally, these companies are rarely consumer facing, which reduces their exposure to boycotts and other forms of direct public pressure.

Faced with this insulated industry, activists began targeting the global brands they sell to: high-end, gold jewellers. They hoped this would offer an entry point into the mining industry and, eventually, give them access to the miners themselves. *Earthworks*, a small Washington-based NGO, joined forces with *Oxfam America* and launched the *No Dirty Gold* (NDG) campaign in 2004. The tactics were not new, and the logic was simple enough.

Consumer brands may not be directly responsible for the impacts of their suppliers, but their demand for goods at the very least enables them. Through corporate shaming and boycotts, the goal of activists is to make this link public. In doing so, activists hope these branded buyers will shift their demand away from suppliers who do not meet industry best practices, offering activists added leverage within industries. But would this strategy work with gold?

Even the activists weren't sure. Most direct targeting campaigns had focused on manufacturing industries, from apparel to footwear to electronics. Others had focused on forestry, fisheries, and agricultural products. But up to this point, activists had never tried targeting the mining industry using these tactics.

With this article, I make two contributions. The first is empirical: documenting this exploratory campaign and mapping activist strategies and outcomes against the global gold production network. The second is theoretical: evaluating what a Global Production Networks (GPN) analysis might contribute to our understanding of industry-activist dynamics and, in particular, the extent to which the characteristics of a commodity and its markets impact activist strategies and outcomes.

The article incorporates interview data collected between 2009 and 2012 as part of a larger project exploring business responses to activist pressure. During this time, I conducted 45 semi-structured interviews with practitioners from both industry and civil society, many of whom had been directly involved in the activist campaign or the industry responses. This material has been supplemented with updated information

from industry websites and databases, campaign literature, continued discussions with industry analysts, and popular media sources where appropriate.

I proceed by offering a brief overview of supply chain activism before proposing how a GPN perspective might inform our understanding of activist strategies and outcomes when targeting extractive industries. I then map out the gold production network and apply the GPN toolkit to the case, drawing out the opportunities and challenges activists have faced when seeking change through branded jewellers. I conclude by evaluating what a GPN approach can teach us about the case, and what this study suggests about the approach itself.

Supply chain activism

Previous studies suggest activists can attain political leverage by targeting visible products at the most branded node of the commodity chain, usually the consumer-facing, retail node (Bartley 2003; Newell 2008). These firms rely on their reputation for market success, making them especially susceptible to activist actions that threaten to degrade their brand (Conroy 2007; Baron and Diermeier 2007). Because this is where the action is, scholarly focus has remained predominantly on activist-brand dynamics.

These dynamics have been well documented in the literature on social movements (Tarrow 2005), transnational activism (Keck and Sikkink 1998), and world civic politics (Wapner 1995). Studies have focused on the collaboration and contestation between firms and activists from a variety of angles: how targeted firms are chosen by activists (O'Rourke 2005; Bartley and Child 2014), how firms respond to campaigns

(Sasser *et al.* 2006; King 2008), and how industry structures impact activist interventions (Schurman 2004; Levy 2008). Less work has been done on how these campaigns actually impact the producers themselves.¹

In their work on the global apparel industry, Locke, Amengual and Mangla (2009) suggest that a key assumption in the literature on activism and voluntary compliance mechanisms (e.g. certification) is that the asymmetry in economic power between powerful global brands and their less powerful suppliers is the key mechanism driving industry responses. Activists force brands to change their buying criteria, which incentivises their suppliers to change practices for fear of losing these major buyers.

In his early work on global commodity chains (GCCs), Gereffi (1994) introduced two ideal-types of chain governance structures: ‘producer-driven’ and ‘buyer-driven’. Producer-driven chains tend to exemplify the classic *Fordist* mode of production comprised of large, integrated industrial enterprises. But most activist and scholarly attention has been on buyer-driven chains, which are dominated by large, branded buyers. These firms stick to the highest value, consumption end of the chain while subcontractors make the goods. The assumption has been that targeting these firms yields the most leverage as they wield significant power over their suppliers while their intangible value makes them susceptible to public shaming and boycotts (Locke *et al.* 2009).

But closer study of ‘most likely’ industries, from footwear and electronics (Gereffi *et al.* 2005) to apparel (Locke *et al.* 2009), have shown that these global brands’ economic leverage over their suppliers is not as great as is commonly assumed. If this is the case

with supply chains led by highly branded and powerful consumer goods companies – ideal circumstances for campaigns using direct targeting tactics (Gereffi *et al.* 2001) – what could these tactics achieve in the mining industry, where some of the world’s largest companies are the producers, selling raw resources to unbranded intermediaries, destined for multiple markets?

GPNs and Activism

When activists target industries directly, they are attempting to achieve two connected goals: (1) to identify and articulate the link between a consumer brand that uses the commodity and the negative practices associated with its production to create consumer pressure on this brand, and; (2) to create supply chain leverage through this brand, incentivising producers to change their practices to meet the new demands of their buyers downstream.

A simplified supply chain account can illuminate the link between the targeted firm and the practices employed by their suppliers, but this link alone does not ensure that activist pressure on the brand translates into pressure on producers. To grasp the power relations running up and down the chain requires a more nuanced understanding of the production network in its entirety.

In theory, a GPN approach should contribute to our understanding of the relationship between the gold production network and the strategies and outcomes of the campaign. Derived from earlier work on GCCs, and evolving alongside more recent work on Global Value Chains (GVCs) (Gereffi *et al.* 2005; Gereffi and Fernandez-Stark 2011; Mayer *et al.* 2017), a GPN approach unpacks the complexity of global production,

nuancing our understanding of the power relations between industry actors, as well as between these actors and their would-be regulators. It differs from conventional supply chain perspectives by emphasising the non-linear nature of global production, viewing global industries as socio-political spaces, and moving beyond a focus on manufacturing (Henderson *et al.* 2002; Coe *et al.* 2004; Coe 2009).

Beyond supply chains

GPN scholars have long pointed to the non-linear nature of commodity production and consumption, suggesting that commodity chain analysis, as originally conceived, obscures this important nuance through its unidirectional ‘chain’ imagery (Hughes 2000; Henderson *et al.* 2002). In contrast, a GPN approach recognises that commodities feed into multiple production chains and markets, with chains intersecting one another to form a web of chains (Sturgeon 2000; Dicken *et al.* 2001; Coe *et al.* 2008).

Including the site of extraction in the analysis reveals how individual commodities feed into multiple product categories and markets. These multiple products and product markets represent ‘exit options’ for producers, diluting the leverage available to activists through their direct-targeting strategies.

In their work on the agri-food industry, Schurman and Munro (2009) have used the term ‘leakage’ when referring to these diminished dependencies between buyers and their suppliers. Additional products and product markets dilute dependency relations by offering suppliers alternative outlets for their products in markets not influenced by activist pressure.

Beyond economic relations

By emphasising the embeddedness of markets and the multidimensional nature of power, a GPN approach recognises the socio-political dimensions of production and consumption, moving the analysis beyond a focus on purely economic relations and leverage.

By stressing that markets are always embedded in particular socio-political settings, GPN scholars recognise that each of these chains – even those for singular products – might feed into multiple markets, each potentially distinct in their governance structure and power dynamics (Hess and Coe 2006; Hess and Yeung 2006). However, while these markets may be distinct, structures and power relations at one node in the network can influence and be influenced by those at other nodes. Thus, the network as a whole must be the point of analysis (Coe and Yeung 2015).

Power is another key concept in GPN analysis. Production networks are sites of social struggle, involving more than simply economic actors. Collaboration and contestation take place not only between industry actors, but also amongst a broad range of interested actors from civil society and the state (Levy 2008; Coe and Yeung 2015). Relatedly, abandoning a parochial focus on economic relations suggests that power can take many forms and, while more difficult to measure, pathways of influence extend beyond simply economic leverage.

Beyond manufacturing

Recent studies from both a GCC and a GPN perspective show how a shift away from a focus on manufactured products to an analysis of the primary commodities themselves

can further nuance our understanding of the power relations running up and down the chain.

Beginning with the work of GCC scholars, the focus of commodity chain analysis has been extended from its original focus on manufactured products to also consider agricultural commodities (Dolan and Humphrey 2000; Gibbon 2001a, 2001b; Ponte 2002; Talbot 2002). Raynolds (2004) notes that this shift in focus problematises the conventional dichotomy of producer-driven versus buyer-driven chains by expanding the universe of firms that could potentially drive chain coordination. For example, Gibbon (2001a) introduced trader-driven chains, which, he argues, are especially prominent in primary commodity production, while Talbot (2002: 705) builds from this, noting how many commodities demonstrate characteristics of all three types of chains. As Talbot argues, if we are to properly characterise these chains, ‘we need to examine the flows along the entire chain, from the raw material to the final consumer.’

Bridge (2008) has done just that by applying the GPN toolkit to the oil industry and its impact on development opportunities. His findings demonstrate the utility of the GPN approach when extended to the extractive sector. One of the key findings is that the state and civil society seem to play especially significant roles in extractives GPNs, something we will consider when looking at gold (Bridge 2008; see also Coe *et al.* 2008).

These studies show how a shift away from a focus on manufactured products to an analysis of the primary commodities themselves can nuance our understanding of the power relations running up and down the chain. Similarly, shifting the focus from the

targeted node of the production network and including other stages in production reveals how suppliers are usually involved in the production of multiple products for numerous product markets. This, in turn, reduces producer dependency on any single product or product market; thereby weakening the economic pressure activists are able to bring to bear by targeting a specific consumer market.

Activism and the gold GPN

For the activists, gold was only part of the equation. The idea was to pressure the high-end jewellers and get them on-board. They hoped this could provide them with enough leverage to get the miners to the table. The thought was that if they could get a couple of the large, diversified mining companies to come, then they could begin a dialogue about improving practices across the industry, regardless of the specific commodity being mined (NDG campaigner, personal communication, 20 September 2010). It is easy to see why gold jewellers made an enticing target for activists.

While end-use consumers may not always distinguish between producers, they do often distinguish between sellers. Retailers tend to be branded and, therefore, concerned with their public image. This appears to hold true for many jewellers, as this product category includes some of the most recognisable brands in the world, from *Tiffany & Co.* to *Cartier*, *Rolex*, and *Bulgari*.

Additionally, the gold in gold jewellery is a highly visible input, as there are few products more visible than adornment. In contrast, the gold employed in the circuits of electronic equipment or dentistry constitutes a much smaller share of the gold market

– which together account for only about 20 per cent of the end-use, consumer market combined – while being much less visible to consumers.

So the opportunity was there to make the link between commodity extraction and recognisable brands. But could activists turn this link into political leverage? Once again, there appeared to be an opportunity with gold.

Gold jewellery, especially engagement rings, is socially endowed with an emotive element, making the product category exceedingly vulnerable to shaming tactics. Additionally, luxury goods, by definition, are non-essential items and so the consumer markets should be very elastic. Their value to consumers is based on wants, not needs. In the luxury goods market, image is everything. Jewellers rely on people's perception of their product. Companies need only recall the results of sustained campaigns against fur products and 'blood diamonds' to remind themselves of the precarious position of luxury items.

The availability of substitutes for consumers will also impact the leverage activists can muster over brands: the more alternatives for consumers, the more easily they can make a switch. There appear to be a few options for customers of gold jewellery. First, consumers may simply switch to alternative luxury goods, such as furs or cars, products that also convey comparable status in most societies. Second, there are competing jewellery products for gold in the form of other precious metals, platinum for example, which some environmentally conscious consumers have opted for (Johnson 2006). Third, consumers can substitute responsibly sourced gold for 'dirty gold', which is

possible if competing companies can guarantee better practices along their supply chains.

So the opportunity for activists was there, and gold jewellers did respond: ‘We wanted to confront issues in a proactive way,’ explained Matthew Runci, president of *Jewelers of America* (JA), an industry group:

‘We in the luxury goods sector have to work very hard at holding the public’s trust because even though the things we sell are very desirable, they are, after all, not essential commodities for life... So we said, “Listen, before we’ve got fires burning all around us, let’s sit down and try to sort this thing out”’ (quoted in Paterson 2006).

Jewellers responded in three ways. First, most major jewellery brands signed on to the activists’ readymade set of principles. These so-called *Golden Rules*² are general principles to be injected into jewellers’ buying criteria to shift demand toward ‘responsible’ mining. Second, many individual jewellers have drafted internal sourcing strategies, beginning the process of integrating these principles throughout their operations. Third, with the help of JA, jewellers created the *Responsible Jewellery Council* (RJC).

This industry-led, not-for-profit organisation requires its members to abide by an auditable set of industry best practices covering conflict minerals, human rights, labour standards, environment, health and safety, and risk management (RJC 2016). The RJC has 732 members, though only six of these are miners (RJC 2016). The vast majority

of its membership works in the middle stages of the production process: 57 refiners, 246 diamond traders, 343 manufacturers, 53 retailers, and 13 ‘service industry’ members.³

Overall, the jewellery sector response seems to mirror the response of other manufacturing industries to past campaigns. It is a response based on mitigating brand risk whilst maintaining the operational autonomy of the industry. But the question remains: to what extent has the campaign reached the miners whose practices activists are ultimately trying to change?

Applying the GPN toolkit

By pushing the analysis beyond a focus on manufacturing, beyond linear supply chain analysis, and beyond a singular focus on economic relations between industry actors, a GPN approach should expand our understanding of both the challenges activists face and the opportunities available to them. Challenges include making the link between the targeted node in extractives production networks and the practices at the site of extraction itself, as well as turning this link into economic leverage. But the approach also reveals new opportunities available to activists, in achieving economic leverage, but also through more subtle pathways of influence.

Moving beyond manufacturing shows how the various stages in global gold production and consumption are geographically dispersed and involve numerous intermediaries. Supply of gold comes from all corners of the world. In 2016, China was the largest producer of gold with approximately 14.7 per cent of the global total, compared to 8.7 per cent for Australia, 8.1 per cent from Russia, 6.7 per cent from the US, Canada

producing 5.5 per cent, Peru with 4.8 per cent, and 4.5 per cent for South Africa (US Geological Survey 2017). The geographic dispersion of this precious metal is demonstrated by the fact that every continent is represented here.⁴ Together these top seven producers still only account for about 53 per cent of gold production. The remaining production is also fairly evenly distributed around the globe, much more so than other major commodities, such as oil (WGC 2011). And technological innovations are making low-grade deposits increasingly commercially viable, further expanding the opportunities for exploration and development (Dougherty 2013). This wide distribution offers mining companies options when deciding where to invest, which, in turn, reinforces their position relative to state regulators when negotiating terms. It has also led to a proliferation of mining companies and a division of labour amongst them.

Industrial, large-scale mining accounts for approximately 90 per cent of gold production by value and includes some of the largest corporations in the world.⁵ In 2016, Toronto's *Barrick Gold* was the largest producer with Nevada's *Newmont Mining* and Johannesburg-based *AngloGold Ashanti* placing second and third, respectively (Basov 2017). But these large, mining 'seniors' are not the only players in extraction.

Exploration comes with significant risk. This has led to a division of labour between risk accepting 'juniors' and the more risk adverse 'seniors', the latter of which have come to specialise in the capital intensive stages of mine development. As Dougherty (2013) notes, low entry and exit barriers at the exploration stage of gold mining have facilitated the proliferation of small, mining juniors, leading to intense competition for access to ore bodies and access to capital. Not only are these juniors incentivised to seek out weak institutional environments to lower their costs of production, they are

also largely protected from public scrutiny by their small size and relative anonymity (Ferguson 2006; Bridge 2004). They compete over access to ore bodies, which is provided by states. And they compete over capital, which is provided by both financial institutions and, often, by the larger mining seniors they partner with. These additional actors from the state and financial markets are, therefore, important coordinating actors in the production network, and need to be considered in the analysis.

So going beyond manufacturing and considering the extraction stage of production nuances our understanding of gold production by revealing additional actors and the power relations between them. It also illuminates specific challenges activists face when politicising the gold production network, namely: (1) gold is extremely difficult to trace through the production network, and; (2) gold suppliers sell to numerous markets. Together, this significantly dilutes the leverage activists might hope to gain through global brands. Let's look at both issues in turn.

Making the link

A GPN perspective takes us beyond the simplified imagery of linear supply chains and, when applied to gold, reveals the true complexity of gold production. This highlights the difficulty in linking gold from specific mine sites to specific jewellery products.

Once the gold concentrate is separated from its environment at the mine, initial processing is usually done onsite or in close proximity to the source. The concentrate is cast into gold doré, a bar of approximately 90 per cent purity.⁶ The gold doré moves from the mines to refiners and from the refiners to a metals exchange, bullion bank, bullion dealer, or straight to manufacturers. The chain can be quite simple or very

complex, but usually extremely difficult to trace. Gold used in US jewellery, for example, is not necessarily mined in the US or even refined regionally. It is a truly *global* production network as gold is valuable enough to be shipped across multiple continents before reaching the end-user.

Even when analytically isolated from other markets for gold, the jewellery supply chain is geographically dispersed and extremely complex. While mining takes place in a fixed territorial location, the creation of a gold ring, for example, is the product of an international affair. Adapting an example from the RJC (Solomon and Nicholls 2010: 6), the gold may be mined by a Canadian company in South Africa, where the ore is then shipped to a refiner in Dubai, after which the gold bullion is sold by a bullion bank to a gold dealer through the Shanghai Gold Exchange, who then ships it to a manufacturer in Thailand, where it is converted to 18-karat, made into a ring in accordance with a standing order, and shipped to a gold retailer in the US.

Although activists attempt to simplify the chain from mine to retail to convey a clear message to their target audience, the reality is that the gold commodity chain is anything but simple. It is greatly complicated by the many above ground sources. Gold is indestructible. This means that gold mined centuries ago still exists in some form above ground, ready to be reintroduced into the production network. The WGC estimates above ground gold stocks to be approximately 168,300 tonnes, with 50 per cent of this total accounted for in jewellery (WGC 2011: 7).

Fluctuations in the price of gold in financial markets can also have an effect on the flow of gold through the production network. For example, the high price of gold from

growing investment demand that accompanies economic downturns, along with the negative impact these downturns have on consumer spending, can lead to a slump in fabrication demand and a surge in the ‘scrap’ supply. This was indeed the case in the wake of the most recent financial crisis when the scrap supply reached about 42 per cent of the total gold supply in 2010, which means the supply chain is far from a linear (Hewitt et al. 2015; Olden 2010).

- INSERT FIGURE 1 ABOUT HERE -

The gold commodity chain is also extremely opaque. Not only is gold valuable enough to be shipped across multiple borders during its perpetual life-cycle – being continuously refined, stored, alloyed, manufactured, bought and sold – information on these different stages and, especially, transport between them is very difficult to come by as it constitutes a severe security threat, not unlike shipping large amounts of cash (WGC representative, personal communication, 18 July 2012). This means that any information activists could gain would be an achievement, and at least partially explains why they needed industry to take the lead in developing the emerging initiatives.

The role of gold as a financial instrument further complicates the production network. As Jennifer Clapp (2014) has found in her research on the agri-food industry, financialisation adds an extra layer of complexity to production networks, which can stymie activist attempts to make links between industry actors and the impacts of their business decisions. Financial interventions in production networks exacerbate distancing by increasing the number and types of actors involved and delinking production and consumption decisions from the physical commodity itself through the

trade in derivatives (Clapp 2014). Activists engaged in direct targeting campaigns are trying to overcome the negative implications of distancing by rearticulating these very links, and the financialisation of production networks is making this task that much more difficult.

By far the largest Over-The-Counter (OTC) market for gold is the London bullion market, overseen by the *London Bullion Market Association* (LBMA), which is itself loosely overseen by the *Bank of England*. This is where central banks, miners, refiners, fabricators and other major players trade gold wholesale between one another. In contrast to trading through an exchange – which offers much more transparency, regulatory oversight and lower risk – OTC markets involve direct trading between two principles. This offers ‘confidentiality’ to buyers and sellers, a selling point that features prominently on the LBMA website (LBMA 2014). This limits the possibility of ever making connections between the principle actors driving supply and demand of gold in financial markets.

The seemingly endless search for new derivatives in the financial sector has driven the proliferation of instruments linked to gold and further complicated the chain of custody. Investors buy and sell gold via Exchange Traded Funds (ETF), futures and options, warrants, gold accounts, Gold Accumulation Plans (GAP), gold certificates, mining stocks, gold oriented funds, and so on. The point here, is that all of this makes gold exceedingly difficult for activists to track through the production network.

Leveraging the link

Even when links to branded jewellers are established, the complexity of the gold commodity chain reduces pressure activists are able to bring to bear on the mining companies themselves. This is because the market power of jewellers, and the potential political leverage available to activists that this represents, is limited by the existence of multiple markets, many embedded in distinct social contexts. While activists stress that 80 per cent of end-use consumer demand comes from the gold jewellery industry (NDG n.d.), this figure leaves out demand for gold as an investment asset.⁷

In addition to making gold difficult to trace, financial markets can also shift the relative market power and, therefore, coordinating roles of the various actors impacting transactions. In terms of activist-industry dynamics, when there is significant demand for commodities from financial markets, it further dilutes the market power activists can muster by targeting end-use consumer markets alone.

If we include demand for gold as a financial asset in its various forms, then jewellery has accounted for closer to half of the worldwide demand for gold (WGC 2017). So while jewellery remains the single most significant driver, and by far the most significant end-use product category, getting jewellers onside does not automatically translate into changing practices at the mine site. Gold's status as a safe financial asset can be expected to prop up its value, regardless of image and end-use consumer preference.

Even considered in isolation, the characteristics of the global market for gold jewellery should temper our expectations for the market leverage available to activists. While estimates vary, the market for branded gold jewellery is only a fraction of the overall

market for gold jewellery, almost certainly less than a third (Olden 2010) and possibly as little as 15 per cent (Industry analyst, personal communication, 2 March 2017). The US market alone is composed of about 28,000 specialty stores. Although the top 50 chains account for almost half of US sales (Hoovers 2011), the thousands of small, independently operated designers or retailers have not been directly targeted by the NDG campaign and tend to be less active in the politics of gold.

Even more significantly, the US is not the only gold jewellery market. Jewellery retail markets exist around the world, each one embedded in distinct socio-economic and institutional settings. This reveals further potential for leakage. Activists have almost exclusively focused on the US jewellery market. But, while the US is the largest developed country market for jewellery, it is not the largest market for gold. In 2014, the two biggest markets for gold were India (842.7 tonnes) and China (813.6 tonnes). The US market then comes in at a distant third (179.2 tonnes). And the gap between the US and the two largest markets is growing. The combined demand from India and China has increased 71 per cent in the last decade (WGC 2015), with China's demand for gold having more than doubled in just a few years (WGC 2012c; Statista 2015). The trend in the global demand for jewellery looks similar. Of the 2041.6 tonnes of gold destined for the jewellery sector in 2016, India demanded 514.0 tonnes, China accounted for 629.0 tonnes, and the US ordered a significantly smaller 132.4 tonnes (WGC 2017). Thus, the combined demand of India and China, accounting for well over half the demand globally, severely limits the market power of US jewellers vis-à-vis their global suppliers.⁸

In these large Asian markets, activists may not even be able to garner the very limited leverage through brands that they have realised in the US market. While the cultural significance of gold is high in all corners of the world, it is particularly so in India, where weddings account for about 50 per cent of gold demand (WGC 2017). This huge market has not yet seen significant penetration by the big brands that the campaign has focused on, and so dilutes rather than reinforces campaign leverage (Industry analyst, personal communication, 3 March 2017). Similar challenges face campaigners in China. The Chinese market for jewellery is less based on emotive marketing and more closely linked to investment. Jewellery prices reflect weight and purity with much smaller mark-ups for design and branding (WGC representative, personal communication, 18 July 2012). As such, this is another potential safety valve for suppliers, further reducing campaign leverage.

Overall, when we consider the large and growing demand for gold in financial markets, the rising demand for jewellery in Asia, and the fact that activist pressure has focused almost exclusively on the US market, we must temper our estimation of the market leverage available to activists. Even if activists can convince a critical mass of gold jewellery consumers in their targeted markets to purchase gold based on its provenance, gold miners and traders enjoy plenty of exit options in the form of alternative buyers. In other words, it seems you can always sell gold.

Lessons from GPN analysis

Despite these challenges, close analysis of the gold production network reveals some potential for activist shame campaigns to economically impact irresponsible mining

companies, while also illuminating some more subtle pathways of influence that activists have gained through their campaign targeting jewellers.

While mining juniors are relatively immune from any direct threat leveraged through consumer markets, they are susceptible to pressure that impacts their access to land and their access to capital. They require land in order to access the ore bodies themselves, and they need capital to facilitate this access and fund the preliminary stages of mine development before they are able to sell their stake to the larger miners. Access to land is largely determined by states, while access to capital is provided through a combination of state financial incentives, private financial institutions, and larger mining companies. Dougherty (2013), in his detailed study of the gold mining industry, reports that Canada, for example, provides a financial regulatory framework that ensures mining juniors easy access to cheap capital.⁹ He also notes that many of these junior miners – although they are largely immune to civil society pressure – often partner with larger mining companies that will provide capital for the initial exploration before they take over at the mine development stage of production.

In theory, activists could exploit these links for leverage. States, branded financial institutions, and even the larger mining companies should be susceptible to similar direct targeting tactics that activists have used against retailers. Activists have succeeded in shaming governments for their lax environmental regulation before, for example, in Canadian forests (Pralle 2006). Likewise, campaigns have spurred policy change in large commercial and investment banks using similar public shaming tactics (Bloomfield 2014). And, during my interviews, representatives from large mining companies made it clear that they valued their reputation, which they felt secured their

own access to land and capital, while potentially giving them an upper hand over competitors when bidding for projects (Rio Tinto representative, personal communication, 7 August 2011). So the precedent is there, and a GPN analysis helps to clarify these links and potential sources of leverage.

Beyond these additional opportunities to achieve economic leverage, paying attention to the socio-political elements of GPNs illuminates some easily overlooked campaign achievements. Although applying the GPN toolkit to the gold case does not reveal a direct connection between activist tactics and changes in mining practices, it does facilitate a deeper understanding of some of the subtler, but still substantial gains made.

Activists knew that gold would be different than markets targeted by activists in the past. With campaigns focused on apparel, footwear, and even agricultural products, the goal of these campaigns was to impact sales by threatening the big, branded buyers of the products. But they knew gold would be different:

‘Gold is going to be sold into the market no matter what the jewellery customer does. As long as there is an investment asset, there is always going to be a market for gold. And there will be for jewellery too. Eventually, you have to get to the mining company (NDG campaigner, personal communication, 21 November 2011).

But even in the more promising industries, empirical study has shown that the threat of economic sanctions in the form of cancelled orders with branded buyers rarely drives change along supply chains. As Locke *et al.* (2009: 321) have found in the apparel

industry, what drives behavioural change in global supply chains appears to be less direct economic incentives and more a process of socialisation. The market leverage that activists gain through targeting global brands is much too limited to force suppliers to comply with specific directives. What activists do gain from the successful deployment of this strategy are much more subtle incentives for companies to engage ‘in a process of root-cause analysis, joint problem-solving, information sharing, and the diffusion of best practices’ (Locke *et al.* 2009). This is a less direct and enforceable, but potentially still productive, route to improving practices within the industry.

So, given these sobering reflections, what have the NDG activists achieved? A fair amount, as it turns out. They have i) gathered information, ii) placed these issues on the industry’s agenda, iii) spurred industry to build institutions around these issues, and even iv) inserted themselves – the activists – into the gold production network. And, perhaps most significantly of all, they have v) formed alliances with industry actors and created an enabling environment in which proactive people have driven incremental change from within. Let us look a little closer at each achievement in turn.

Activists have gathered important information about what has traditionally been an extremely opaque industry. Through their ability to link organisations to particular practices within the production network, activists construct the industry as a political field. David Levy compares GPNs to the concept of ‘organisational field’, which, as Hardy and Philips (1998: 218, cited Levy 2008) argue, ‘emerge as different organisations perceive themselves to be connected to common issues. They are not objective, predetermined structures, but processes of social construction and meaning creation, wherein social order is negotiated.’ Thus, gathering and disseminating

information about these connections becomes an important step in the (re)construction and politicisation of GPNs.

The next stage is the creation of institutions through which this information is examined and issues are discussed. Over the course of 18 months, the activists had launched this new initiative, organised a series of meetings, set the agenda and, with the high-end jewellers onside, convinced the mining companies to come:

‘And, boom, we’re sitting there in this big forum, and clearly we were the ones setting the tone. We set the agenda. And they were responding to us. And then, six months later, there is the RJC’ (NDG campaigner, personal communication, 21 November 2011).

The activists stayed engaged with the RJC as it developed. They wanted to see what these business actors would come up with, hoping that industry could figure out a supply chain mechanism that the activists could then fit their standards into (NDG campaigner, personal communication, 21 November 2011). While the RJC remains contentious amongst activists (Henley 2013), it has recently ratcheted-up its standards by introducing an optional chain-of-custody certification from refiner to retailer, has added consultative seats on its Board to civil society actors, and has become certified by the International Social and Environmental Accreditation and Labelling (ISEAL) Alliance, which certifies certifications (ISEAL 2014; RJC 2012). Indeed, the RJC has been diligent in engaging with activists and other stakeholders, including demonstrating how the RJC standards track closely to those advocated by the activists in the *Golden Rules*.¹⁰

In a significant step forward, the recently added Chain-of-Custody (CoC) certification allows members who choose this option to make provenance claims about the materials they use. As of 2016, there were 418 certified members: five mining companies, 168 refiners, 34 diamond traders, 162 manufacturers, 39 retailers, and 10 service industry members (RJC 2016). So what does this mean in terms of industry practices?

Gold is eligible to be certified if it is ‘conflict-free’ and mined by a CoC entity, recycled, or ‘grandfathered in’ (having existed in its current form prior to 2012). For a company to be certified, it needs to keep its certified gold separate from its uncertified gold until its buyer takes delivery. So the segregation, auditing, and labelling are new practices. As are the establishment of certain practices as best practices. And, importantly, the certification extends the chain-of-custody all the way to the mine sites. But so far the actual impact on mining practices appears to be limited.

The main limiting factor is that mining companies can be certified without all of their operations being certified. For example, *Rio Tinto*, one of the founding members of the RJC, has CoC certified its gold and diamonds destined for the jewellery supply chain. The catch is that all the certification actually covers, as far as gold goes, is the company’s *Kennecott Utah Copper* mine in the US, which was already *Rio Tinto*’s flagship mine. This mine already used the highest standards, in a highly regulated environment, with onsite, cyanide-free refining facilities. In the world of mines, this is a good one. But this then is a case of the RJC certifying practices already in existence, and not evidence of significantly changing mining practices on the ground.

Note that the RJC does not actually promise changes in mining practices. To date, they have neither made this claim, nor seemingly aspire to this goal. What RJC does do is provide a way for companies buying gold to manage their exposure to risk and reinforce their brand by ensuring their gold is not coming from problematic sites. Through this system, the goal is to enhance consumer confidence in the industry while creating incentives for RJC members to recruit new members within their supply chains, constructing and consolidating this ‘virtuous’ chain of custody (Industry analyst, personal communication, 3 March 2017).

Speaking about the RJC and similar institutions created in the wake of the NDG campaign, one activist notes that with gold, there is a ‘secondary game’ going on. This game is about access to ore bodies, access to capital, and maintaining a social license to operate:

‘RJC matters, but, to me, it matters only as much as it helps me get to those three variables. There is a secondary game going on here, underneath it all. And that’s where I think, interestingly, that there is a lot of progress being made’ (NDG, personal communication, 21 November 2011).

So the activists aren’t necessarily driving the creation of these institutions, nor are these institutions expected to resolve all of the issues associated with mining. But what the activists have achieved is that they have placed these issues on the agenda of actors working along the gold production network and, when these actors acknowledge the issues, a kind of ‘responsibilisation’ occurs. In other words, activists are not simply changing economic incentives in production networks, but are also shifting

understandings of appropriate practices, and ideas about managerial roles and responsibilities shift with them.¹¹

Activists have also inserted themselves into the gold production network, giving themselves a platform to push the agenda forward. While firms will continue to resist ceding operational autonomy to the activists, they do appear to be increasingly willing to engage with them. For example, activists point out that representatives from mining companies attended the initial meetings, and the companies they represented became founding members of what eventually developed into the RJC. Mining companies have also been engaged in the dialogues aimed at creating a certification for mining sites themselves, called the Initiative for Responsible Mining Assurance (IRMA), which is slowly inching closer to becoming a reality. So it is not only the jewellery retailers participating, but the mining companies have also seen it in their interest to engage in the programme the activists have created.

And, perhaps the most important achievement of activists has been gaining allies in the industry and strengthening the voices of those actors working along the production network who are pushing for change. The activists have strengthened the voice of people within companies who are now working with them to drive the agenda forward.¹² According to one of the organisers of the NDG campaign, the gold industry has made significant progress. This progress cannot be directly attributed to campaign pressure, but the campaign has helped create an enabling environment for NGOs and industry, including miners, to work toward resolving some of these issues.

‘It has created the atmosphere within which this stuff takes place. It’s not because anybody has seen sales of gold in the marketplace impacted, which was the premise, if you look at the organising premise around other market campaigns... that was the premise: market share. And if you look at the market share issue in gold and minerals, I don’t see it. There is a different game going on’ (NDG, personal communication, 21 November 2011).

Despite the challenges in gaining any sort of economic leverage over miners, the campaign still appears to have had an impact on the production network. It is stigmatising certain practices and introducing new norms for best practice into the industry. These norms are being incorporated into industry-wide benchmarks by institutions like the RJC, which further diffuse these standards through educating and auditing its industry membership. While companies are acting individually to address these issues, more profound change requires collective action; forums like the RJC create space in which conversations between industry actors, and between industry actors and activists, can take place (Industry analyst, personal communication, 3 March 2017).

While it is important to recognise these achievements, we must remain sober in our evaluation of them. The structural barriers that limit activist interventions remain. While activists have inserted themselves and their concerns into the gold production network, thereby politicising the market and spurring companies to react, industry actors have thus far done so on their own terms. The responses have been limited to those that can be justified within the market context; responses backed by a ‘business case’. But what constitutes a business case shifts with changing market realities and,

importantly, interpretations of them. As such, applying normative pressure and injecting new legitimacy concerns into the GPN can have a tangible impact on actual existing practices moving forward.

Conclusion

A GPN approach is different than conventional supply chain analysis. GPNs are not simply linear flows of goods through various stages of production. They are arenas of social struggle (Levy 2008). And not just between economic actors directly engaged in processing commodities, such as miners, refiners, manufacturers, bullion banks, and jewellers. GPNs include the actors that finance production and consumption at every stage of processing. They include the state as regulator and, in the case of most extractive industries, as primary resource holder, consumer, and financier (Bridge 2008). They include industry groups that organise business interests (e.g. JA, WGC), the institutions that govern practices (e.g. RJC) and, once an industry is politicised, even the activists themselves.

The GPN toolkit does not offer us clear criteria by which to judge the effectiveness of campaigns targeting extractive industries, nor does it offer us a clear idea about whether this campaign should be considered a success or a failure. What a GPN analysis does offer is a much clearer picture of the structural impediments to activist influence through economic leverage alone, and a nuanced picture of the ways in which activists are imposing new norms and legitimacy concerns into the GPN. Certain practices are being stigmatised, which is, admittedly, only a first step toward changing practices on the ground. But existing studies have shown how standards can diffuse across GPNs,

and so there is potential to build off the modest gains of the NDG campaign, as well as the work of the RJC.

This has been a first step toward extending the GPN approach to understand activist-industry dynamics within extractives production networks. While some of the findings are unique to gold, the study suggests that applying this framework to other industries and activist campaigns should unearth similarly useful results.

A GPN approach reveals how the nature of a commodity and its markets impact the power relations between the various actors working within the network. These power relations, in turn, are reflected in the institutions that channel production and consumption decisions. And, together, power relations and institutions help shape the environmental, social, and economic outcomes of the industrial process.

Importantly, a GPN approach highlights how the relations between the various actors working within a production network are not simply ‘market-based’, and not solely economic in nature. There are both material and discursive dimensions to power and production. In comparison, evaluating activist opportunities for impact using traditional supply chain logic risks missing the politics, and missing the full potential of activist direct-targeting campaigns.

Notes

¹ Though see Schurman and Monroe 2009 for an important exception.

² http://nodirtygold.earthworksaction.org/retailers/golden_rules#.WH3HHPMnZOs

³ This category includes industry groups.

⁴ Not including Antarctica, where there is a moratorium on mining in place.

⁵ The remaining 10 per cent is accounted for by artisanal, small-scale mining (ASM).

⁶ The remaining 10 per cent is made up of other metals, usually copper or silver.

⁷ It is important to recognise that NDG activists are very clear about their figure not including the investment market, none-the-less the claim still serves to inflate expectations for the leverage available through the buying power of jewellers and, ultimately, consumers.

⁸ This number was as high as 68 per cent only a year earlier (WGC 2015). Though these numbers fluctuate quarterly, the general trends outlined in this article remain consistent.

⁹ Dougherty (2013: 350) details how this is accomplished by offering tax incentives and lenient corporate governance standards, including lax regulations for reporting on environmental and social performance.

¹⁰ This is evident in the mapping and comparing across the NDG *Golden Rules* and RJC standards, undertaken by the RJC in response to requests made by stakeholders (RJC 2010).

¹¹ The approach and impact are reminiscent of what John Ruggie, architect of the UN's voluntary principles for global corporations, the Global Compact, has described as a 'learning network approach' (Ruggie 2002). The campaign has led to a series of meetings and the creation of institutions in which consensus is being formed around environmental and social concepts, such as what 'responsible mining' actually entails. This, Ruggie contends, is an important stage in the governance process, a necessary precursor to viable codes of conduct and, potentially, the advent of legally binding rules (2002: 32).

¹⁰ For a detailed analysis of patterns and variation amongst US jewelers to the NDG campaign see Bloomfield 2017.

References

Australian Associated Press. 'Brazil to sue mining companies BHP and Vale for \$5bn over dam disaster', *The Guardian*, 28 November, Retrieved from <http://www.theguardian.com/world/2015/nov/28/brazil-to-sue-mining->

companies-bhp-and-vale-for-5bn-over-dam-disaster

- Baron, D. and Diermeier, D. (2007), 'Strategic Activism and Non-Market Strategy', *Journal of Economics and Management Strategy*, 16 (3), pp. 599-634.
- Bartley, T. (2003), 'Certifying Forests and Factories: States, Social Movements, and the Rise of Private Regulation in the Apparel and Forest Products Fields', *Politics & Society*, 31 (3), pp. 433-464.
- Bartley, T. and Child, C. (2014), 'Shaming the Corporation: The Social Production of Targets and the Anti-Sweatshop Movement', *American Sociological Review*, 79 (4), pp. 653-679.
- Basov, V. (2017), 'World's top 10 gold mining companies, 2016', *Mining.com*, Available at Mining.com <http://www.mining.com/update-worlds-top-10-gold-producers/>
- Bloomfield, M (2014), 'Shame campaigns and environmental justice: corporate shaming as activist strategy', *Environmental Politics*, 23 (2), pp. 263-281.
- Bridge, G. (2004), 'Contested Terrain: Mining and the Environment', *Annual Review of Environment and Resources*, 29, pp. 205-259.
- Bridge, G. (2008), 'Global production networks and the extractive sector: governing resource-based development', *Journal of Economic Geography*, 8 (3), pp. 389-419.
- Clapp, J. (2002), 'The Distancing of Waste: Overconsumption in a Global Economy', in Thomas Princen, Michael Maniates and Ken Conca (eds), *Confronting Consumption* (Cambridge, MA: MIT Press), pp. 155-176.
- Clapp, J. (2014), 'Financialization, distance and global food politics', *Journal of Peasant Studies*, DOI: 10.1080/03066150.2013.875536
- Coe, N. (2009). 'Global production networks'. In *The international encyclopedia of*

- human geography* by. R. Kitchin and N. Thrift (eds). Oxford: Elsevier. 4, pp.556–62.
- Coe, N., Hess, M., Yeung, H. W.-C., Dicken, P., Henderson, J. (2004), ‘‘Globalizing’ regional development: a global production networks perspective’, *Transactions of the Institute of British Geographers*, 29 (4), pp.468-484.
- Coe, N., Dicken, P. and Hess, M. (2008), ‘Global Production Networks: Realizing the Potential’, *Journal of Economic Geography*, 8 (3), pp.271-95.
- Coe, N., Dicken, P. and Hess, M. (2008), ‘Global production networks: Realizing the potential’, *Journal of Economic Geography*, 8 (3), pp. 271–295.
- Coe, N. and Yeung, H. (2015), *Global Production Networks: Theorizing Economic Development in an Interconnected World* (Oxford: Oxford University Press).
- Conroy, M. (2007), *Branded!: How the ‘Certification Revolution’ is Transforming Global Corporations* (Gabriola Island, BC: New Society Publishers).
- Dicken, P., Kelly, P., Olds, K. and Wai-Chung Yeung, H. (2001), ‘Chains and networks, territories and scales: Towards a relational framework for analysing the global economy’, *Global Networks*, 1 (2), pp. 89–112.
- Dolan, C. and Humphrey, J. (2000), ‘Governance and trade in fresh vegetables: The impact of UK supermarkets on the African horticulture industry’, *Journal of Development Studies*, 37 (2), pp. 145–176.
- Dougherty, M. (2013), ‘The Global Gold Mining Industry: Materiality, Rent-seeking, Junior Firms and Canadian Corporate Citizenship’, *Competition & Change*, 17 (4), 339–354.
- Engelen, E. (2008), ‘The Case for Financialization’, *Competition & Change*, 12, pp. 111–119.
- Epstein, G. (2005), *Financialization and the world economy* (Cheltenham: Edward

- Elgar).
- Ferguson, J. (2006), *Global Shadows: Africa in the Neoliberal World Order* (Durham, NC: Duke University Press).
- French, S., Leyshon, A. and Wainwright, T. (2011), 'Financializing space, spacing financialization', *Progress in Human Geography*, 35 (6), pp. 798–819.
- Froud, J., Johal, S., Leaver, A. and Williams, K. (2006), *Financialization and Strategy: Narrative and Numbers* (London: Routledge).
- Gereffi, G., and Korzeniewicz, M. (eds.) (1994), *Commodity Chains and Global Capitalism* (Westport, CT: Praeger).
- Gereffi, G. (1994), 'The Organisation of Buyer-driven Global Commodity Chains: How U.S. Retailers Shape Overseas Production Networks', in G. Gereffi and M. Korzeniewicz (eds), *Commodity Chains and Global Capitalism* (Westport, CT: Praeger), pp. 95–122.
- Gereffi, G., Garcia-Johnson, R. and Sasser, E. (2001), 'The NGO-industrial complex', *Foreign Policy*, 125 (4), pp. 56–65.
- Gereffi, G., Humphrey, J. and Sturgeon, T. (2005), 'The Governance of Global Value Chains', *Review of International Political Economy*, 12 (1), pp. 78–104.
- Gereffi, G. and Fernandez-Stark, K. (2011), 'Global Value Chain Analysis: A Primer', *Center on Globalization, Governance and Competitiveness (CGGC)*, Durham, NC: Duke University.
- Gibbon, P. (2001a), 'Upgrading primary production: A global commodity chain approach', *World Development*, 29 (2), pp. 345–363.
- Gibbon, P. (2001b), 'Agro-commodity chains', *IDS Bulletin*, 32 (3), pp. 60–68.
- Henderson, J., Dicken, P., Hess, M., Coe, N. and Wai-Chung Yeung, H. (2002), 'Global production networks and the analysis of economic development', *Review of*

- International Political Economy*, 9 (3), pp. 436-464.
- Henley, W. (2013), 'Is the Responsible Jewellery Council an imitation ethical standards body?', *Guardian*, 11 June.
- Hess, M. and Coe, N. (2006), 'Making connections: global production networks, standards and embeddedness in the mobile telecommunications industry', *Environment and Planning A*, 38, pp. 1205–1227.
- Hess, M. and Yeung, H. (2006), 'Whither global production networks in economic geography? Past, present and future', *Environment and Planning A*, 38, pp. 1193–1204.
- Hewitt, A., Keel, T., Tauber, M. and Le-Fiedler, T. (2015), *The Ups and Downs of Gold Recycling: Understanding Market Drivers and Industry Challenges*. London: World Gold Council and Boston Consulting Group.
- Hoovers (2011), 'Jewellery Stores Report', *Hoovers*. Available at Hoovers, <http://www.hoovers.com/industry-facts.jewellery-watch-retail.1540.html>, accessed September 23, 2012.
- Hughes, A. (2000), 'Retailers, knowledges, and changing commodity networks: The case of the cut flower trade', *Geoforum*, 31, pp. 175–190.
- IDEX (2011), *IDEX Magazine: Full Story*. Available at IDEX Magazine, http://idexonline.com/portal_FullMazalUbracha.asp?id=35292, accessed September 3, 2012.
- ISEAL (2014), *New Full ISEAL Member: Responsible Jewellery Council* (London: ISEAL Alliance). Available at <http://www.isealalliance.org/online-community/organisations/responsible-jewellery-council>, accessed March 1, 2014.
- Johnson, K. (2006), 'With this ethical ring I thee wed', *New York Times*, 6 April.

- Keck, M. and Sikkink, K. (1998), *Activists Beyond Borders: Advocacy Networks in International Politics* (Ithaca, NY: Cornell University Press).
- King, B. (2008), 'A Political Mediation Model of Corporate Response to Social Movement Activism', *Administrative Science Quarterly*, 53 (3), pp. 395-421.
- Klein, N. (1999), *No Logo: Taking Aim at the Brand Bullies* (New York: Picador).
- Klein, N. (2014), 'Climate change: how to make the big polluters pay', *Guardian*, 17 October.
- Larmer, B. (2009), 'The Real Price of Gold', *National Geographic*, 215 (1), pp. 34–61.
- LBMA (2012), *London Bullion Market Association*. Available at, <http://www.lbma.org.uk/pages/index.cfm>, accessed September 23, 2012.
- Levy, D. (2008), 'Political contestation in global production networks', *Academy of Management Review*, 33 (4), pp. 943–963.
- Locke, R., Amengual, M. and Mangla, A. (2009), 'Virtue out of Necessity?: Compliance, Commitment and the Improvement of Labor Conditions in Global Supply Chains', *Politics & Society*, 37 (3), pp. 319-351.
- Mayer, F. W., Phillips, N., and Posthuma, A. C. (2017), 'The Political Economy of Governance in a "Global Value Chain World,"' *New Political Economy*, 22 (2), pp. 129–133.
- Montgomerie, J. (2006), 'The Financialization of the American Credit Card Industry', *Competition & Change*, 10, pp. 301–319.
- NDG (n.d.), *Jewellery Demand Drives Gold Mining*. Available at No Dirty Gold, http://nodirtygold.earthworksaction.org/retailers/jewellery_demand#.UxHleIWJmSo, accessed March 1, 2014.
- Newell, P. (2008), 'Civil Society, Corporate Accountability, and the Politics of Climate Change', *Global Environmental Politics*, 8 (3), pp. 122-153.

- Olden, P. (2010), *Gold and the Jewellery Supply Chain: A Context*, Unpublished presentation (London: Responsible Jewellery Council), 18 May. Available at Responsible Jewellery Council, http://www.responsiblejewellery.com/files/RJC_18_May_Philip_Olden.pdf, accessed March 2, 2014.
- O'Rourke, D. (2005), 'Market movements: nongovernmental strategies to influence global production and consumption', *Journal of Industrial Ecology*, 9 (1–2), pp. 115–128.
- Patterson, K. (2006), 'Pure Gold? Precious Metal a Potent Symbol in the Battle Over Corporate Social Responsibility', *The Ottawa Citizen*, 12 February.
- Ponte, S. (2002), 'The "latte revolution"? Regulation, markets and consumption in the global coffee chain', *World Development*, 30 (7), pp. 1099–1122.
- Pralle, S. (2006), *Branching Out, Digging In: Environmental Advocacy and Agenda Setting* (Washington, DC: Georgetown University Press).
- Princen, T. (1997), 'The Shading and Distancing of Commerce: When Internalization is Not Enough', *Ecological Economics*, 20 (3), pp. 235–253.
- Princen, T. (2002), 'Distancing: Consumption and the severing of feedback', in T. Princen, M. Maniates and K. Conca, *Confronting Consumption* (Cambridge, MA: MIT Press), pp. 103–131.
- Raynolds, L. (2004), 'The Globalization of Organic Agro-Food Networks', *World Development*, 32 (5), pp. 725–743.
- RJC (2010), Retrieved 25 August 2016, from http://www.responsiblejewellery.com/files/Comparison_RJC_COP_NDG_IRMA_16_02_2010.pdf.
- RJC (2012), *2012 Annual Progress Report* (London: Responsible Jewellery Council).
- RJC (2016), *2016 Annual Progress Report* (London: Responsible Jewellery Council).

- Ruggie, J. (2002), 'The theory and practice of learning networks: Corporate social responsibility and the Global Compact', *Journal of Corporate Citizenship*, 5, pp. 27-36.
- Sachs, J. and Warner, A. (2001), 'The Curse of Natural Resources', *European Economic Review*, 45 (4–6), pp. 827–838.
- Sasser, E. (2003), 'Gaining Leverage: NGO Influence on Certification Institutions in the Forest Products Sector', in L. Teeter, B. Cashore and D. Zhang, *Forest Policy for Private Forestry: Global and Regional Challenges* (Wallingford: CABI), pp. 229-244.
- Sasser, E., Prakash, A., Cashore, B. and Auld, G. (2006), 'Direct Targeting as an NGO Political Strategy: Examining Private Authority Regimes in the Forestry Sector', *Business and Politics*, 8 (3), pp. 1-32.
- Schurman, R. (2004), 'Fighting 'Frankenfoods': Industry Opportunity Structures and the Efficacy of the Anti-Biotech Movement in Western Europe', *Social Problems*, 51 (2), pp. 243–268.
- Schurman, R. and Munro, W. (2009), 'Targeting Capital: A Cultural Economy Approach to Understanding the Efficacy of Two Anti-Genetic Engineering Movements', *American Journal of Sociology*, 115, pp. 155-202.
- SEC (2012), *SEC Adopts Rule for Disclosing Use of Conflict Minerals*, US Securities and Exchange Commission Press Release, August 22. Retrieved 3 March 2014, from <http://www.sec.gov/News/PressRelease/Detail/PressRelease/1365171484002#.UxSphoVAeik>, accessed March 3, 2014.
- Solomon, F. and Nicholls, G. (2010), 'Chain-of-Custody in the Diamond and Gold Jewellery Supply Chain: Issues and Options', Unpublished discussion paper (Melbourne: Responsible Jewellery Council).

- Statista (2015), 'Gold consumer demand by major countries 2014', *Statista*, Retrieved 20 December 2015, from <http://www.statista.com/statistics/299638/gold-consumer-demand-by-top-consuming-country/>
- Sturgeon, T. (2000), 'How do we define value chains and production networks?', *MIT IPC Globalization Working Paper 00-010*.
- Talbot, J. (2002), 'Tropical commodity chains, forward integration strategies and international inequality: Coffee, cocoa and tea', *Review of International Political Economy*, 9 (4), pp. 701–734.
- Tarrow, S. (2005), *The new transnational activism* (Cambridge: Cambridge University Press).
- US Geological Survey (2017), *Mineral Commodities Survey 2017* (Reston, VA: United States Geological Survey).
- Van der Zwan, N. (2014), 'Making sense of financialization', *Socio-Economic Review*, 12, pp. 99-129.
- Vaughan, A. (2014), 'Lego ends Shell Partnership following Greenpeace campaign', *Guardian*, 9 October.
- Wapner, P. (1996). *Environmental Activism and World Civic Politics* (Albany, NY: SUNY).
- WGC (2011), *Gold: A Commodity like No Other* (London: World Gold Council).
- WGC (2012a), *World Gold Council Conflict-Free Gold Standard: An Introduction* (London: World Gold Council).
- WGC (2012b), *Conflict-Free Gold Standard: Exposure Draft* (London: World Gold Council).
- WGC (2012c), *Gold Demand Trends: First quarter 2012* (London: World Gold Council).

WGC (2012d), *The Economic Contribution of Large-Scale Gold Mining in Peru*, 2nd ed. (London: World Gold Council).

WGC (2015), *Gold Demand Trends: Full Year 2014* (London: World Gold Council).

WGC (2017), *Gold Demand Trends: Full Year 2016* (London: World Gold Council).

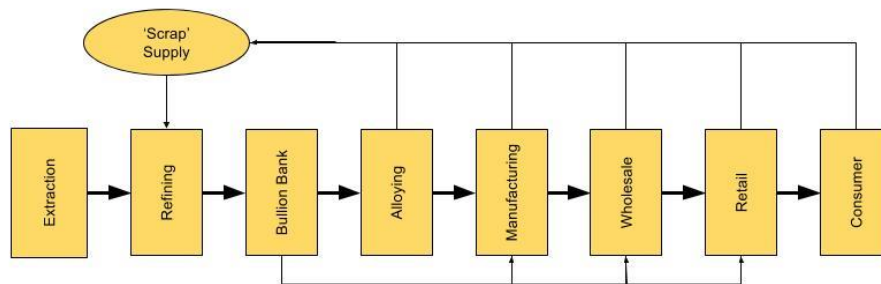


Figure 1: Gold jewellery supply chain (Adapted from Olden, 2010).